WHAT IS CLAIMED IS:

1. An antenna, comprising:

an antenna element;

a first resin member, integrally molded with the antenna element, the first resin member including:

a plurality of protrusions, formed on an outer peripheral face of the first resin member and arranged with a fixed interval relative to a circumferential direction of the first resin member; and

a tip end portion, having a cross sectional shape in which projected portions are arranged with a fixed interval relative to the circumferential direction of the first resin member; and

a second resin member, coated on the first resin member so as to have a thickness substantially identical with a height of each of the protrusions.

2. The antenna as set forth in claim 1, wherein the tip end portion of the first resin member is shaped into a prismoid having conical faces facing directions at which the protrusions are arranged.

3. The antenna as set forth in claim 1, wherein the tip end portion of the first resin member is shaped into a pyramid having conical faces facing directions at which the protrusions are arranged.

4. A method of manufacturing an antenna, comprising steps of:

providing an antenna element;

placing the antenna element in a first mold for molding a first r sin member including:

a plurality of protrusions, formed on an outer peripheral face of the first resin member and arranged with a fixed interval relative to a circumferential direction of the first resin member; and

a tip end portion, having a cross sectional shape in which projected portions are arranged with a fixed interval relative to the circumferential direction of the first resin member;

injecting insulating resin into the first mold to form the first resin member;

placing the first resin member in a second mold such that the protrusions are brought into contact with an inner face of the second mold; and

injecting insulating resin into the second mold from a gate confronting the tip end portion of the first resin member, to form a second resin member coated on the first resin member.

5. The manufacturing method as set forth in claim 4, wherein the first mold is configured such that the tip end portion of the first resin member is shaped into a prismoid having conical faces facing directions at which the protrusions are arranged.

6. The manufacturing method as set forth in claim 4, wherein the first mold is configured such that the tip end portion of the first resin member is shaped into a pyramid having conical faces facing directions at which the protrusions are arranged.